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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/631,798	07/31/2003	Akihito Okayasu	P/647-143	1997
2352	7590	11/17/2005	EXAMINER	
OSTROLENK FABER GERB & SOFFEN 1180 AVENUE OF THE AMERICAS NEW YORK, NY 100368403			CHOI, JACOB Y	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/631,798

Applicant(s)

OKAYASU, AKIHITO

Examiner

Jacob Y. Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 25 August 2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claim 8 is objected to because of the following informalities: the term "downloads" in claim 8 is a relative term which renders the claim indefinite. The term "downloads" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-4 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Yoshida (USPN 6,761,462).

Regarding claim 1, Yoshida discloses key input means (e.g., Figure 1) for inputting characters by key input in a plurality of character input modes, switching means (key input as on/off function) for switching a plurality of character input modes, a key backlight (e.g., Figure 2) which is placed on a lower surface of the key input means and

is lighted in a plurality of colors, and key backlight lighting control means for changing a lighting color and a lighting position, "as a light source of the lighting means for lighting these plural buttons from their backsides (the inside of the box body), there are provided the red LED 51 and the green LED 52 ... by causing these LED of two colors to emit the light selectively or simultaneously, backlights of three lighting colors; red, green and orange can be obtained" (column 2, lines 20-30), of the key backlight in accordance with switching of character input modes.

Note: claims in a pending application should be given their broadest reasonable interpretation, for example "a lighting position" can be broadly interpreted as red LED as a first position & green LED as second position. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 2, Yoshida discloses the key input means comprises a plurality of keys, the key backlight comprises light-emitting means located at lower surfaces of the respective keys, and the key backlight lighting control means changes a lighting color of only the light-emitting mean located at the lower surface of a key which can be used for character input operation in a set character input mode.

Regarding claim 3, Yoshida discloses the device further comprises storage means (set operation provided by e.g., RAM, shown in Figure 3, columns 3-4, lines 5-65 or "a mail memory button") for storing correspondence data between a plurality of character input modes and a plurality of colors, and when a signal indicating that a character input mode is switched is input from the key input means, the key backlight

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control means determines a light color of the key backlight by referring to the storage means (e.g., Figure 3).

Regarding claim 4, Yoshida discloses the storage means comprises first storage means which cannot be overwritten (certain operation performs specific functions only), and the correspondence data is stored as an initial setting value in the first storage means.

Regarding claim 9, Yoshida discloses a key input device is a cell phone.

4. Claims 1, 2 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Sunga Mitsuhide (JP 2001-217904).

Regarding claim 1, Sunga Mitsuhide discloses key input means (4; [0007]) for inputting characters by key input in a plurality of character input modes, switching means (key input as on/off function and [0022]) for switching a plurality of character input modes, a key backlight (5) which is placed on a lower surface of the key input means and is lighted in a plurality of colors, and key backlight. "a multi-color lighting section 5 is provided on a bottom side of the keys respectively and a plurality of the multi-color lighting sections 5 are simultaneously or individually lighted in two or more different colors in response to the telephone operation to light or flicker the keys of the operation key section 4". lighting control means for changing a lighting color of the key backlight in accordance with switching of character input modes.

Regarding claim 2, Sunga Mitsuhide discloses the key input means comprises a plurality of keys, the key backlight comprises light-emitting means located at lower surfaces of the respective keys, and the lighting control means changes a lighting color

of only the light-emitting mean [0008 and 0021] located at the lower surface of a key which can be used for character input operation in a set character input mode [0001].

Regarding claim 9, a key input device is a cell phone (1; [0035]).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura (USPN 6,762,740) in view of Parker et al. (USPN 5,975,711).

Regarding claim 1, Kimura discloses key input means (2) for inputting characters by key input in a plurality of character input modes, switching means (key input as on/off function) for switching a plurality of character input modes, a key backlight (backlight; column 4, lines 20-65) which is placed on a lower surface of the key input means and is lighted in a plurality of colors (7 colors; red, blue, yellow, green purple, orange, and white), and lighting control means (15; CPU) for changing a lighting color of the key backlight in accordance with switching of character input modes.

Kumura suggest, "the color of the backlight is varied corresponding to each function ... the main body 1 has a backlight that lights at least the key input portion or the LCD portion from the rear ... the backlights in, for example, seven colors that are

red, blue, yellow, green, purple, orange, and white ... as with the LCD portion, LED indicator lights in seven colors ... etc; column 4, lines 25-45).

Kumura failed to disclose control means for changing a light color and a lighting position of the key backlight. In other words, failed to show individual lights, for example seven colors, with the LCD portion.

Parker et al. teaches a common backlight assembly including separate LEDs (22; e.g., Figure 3) connected with the light guide / light conducting panel (17), where each LED represents a lighting position.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a common backlight assembly of Parker et al. and combine with teachings of Kumura to include multiple colors of light connected with the light conducting panel where each light source is in spaced apart to be illuminated. The following modification would similarly provide ecstatic appearance of light changing operation on his/her hand phone device based on users operation need.

Note: claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 2, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the key input means (2) comprises a plurality of keys (Figure 1), the key backlight comprises light-emitting means located at lower surfaces of the respective keys, and the lighting control means (CPU) changes a

lighting color of only the light-emitting mean located at the lower surface of a key which can be used for character input operation in a set character input mode.

Regarding claim 3, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the device further comprises storage means (12, 13; Figure 2) for storing correspondence data between a plurality of character input means and a plurality of colors, and when a signal indicating that a character input mode is switched is input from the key input means, the key backlight lighting control means (CPU) determines a lighting color of the key backlight by referring to the storage means.

Regarding claim 4, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the storage means comprises first storage means which cannot be overwritten (13), and the correspondence data is stored as an initial setting value in the first storage means.

Regarding claim 5, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the storage means comprises second storage means (12) which can be overwritten, and the key back light lighting control means writes the correspondence data as a user setting value in the second storage means.

Regarding claim 6, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the key backlight lighting control means preferentially refers to a user setting value when the user setting value is stored (schedule function, anniversary function, calendar function ... etc; Figure 3).



Regarding claim 7, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the storage means further comprises key backlight application setting lighting color data for setting a lighting position of the key backlight, and the key backlight lighting control means determines a lighting color of the key backlight by referring to at least one of key backlight application setting lighting color data and key backlight application setting lighting position data (Figures 6, 7).

Regarding claim 8, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses the key backlight lighting control means downloads key backlight application setting lighting color data and key backlight application setting lighting position data.

Regarding claim 9, Kimura in view of Parker et al. discloses the claimed invention. In addition, Kimura discloses a key input device is a cell phone.

### ***Response to Amendment***

7. Examiner acknowledges that the applicant has amended claims 1 & 2. Claims 1-9 are pending in the application.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features claims in a pending

application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974), where prior art reference clearly shows, e.g., Figure 4, first storage means which cannot be over written (13; certain operation performs specific functions only) and second storage means which can be over written (12)

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the control can be made according to the rule of the data set which is given to the application subsequently to its being downloaded ... the initially built-in function in the main body of the apparatus is also a feature of this claim) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

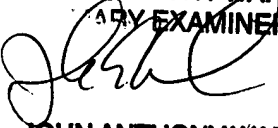
Chi et al. (USPN 6,677,931) - keyboard

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

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